WHAT IS CLAIMED IS:

1. A back reflective mirror which is used in a back projection type video display device for projecting an optical image from a back side of a screen in response to a video signal by a projection unit and which changes an optical path of a projected video light from the projection unit in a screen direction, the mirror comprising:

a glass substrate;

a reflective film of silver or a silver alloy forming a reflective surface on the glass substrate; and

a topcoat film formed of a transparent resin on the reflective film.

2. The back reflective mirror according to Claim 1, wherein the topcoat film has a film thickness of 1 μm or less.

3. The back reflective mirror according to Claim 1, wherein the topcoat film is formed of an acrylic resin.

4. A back reflective mirror which is used in a back projection type video display device including a red projection tube, a green projection tube, and a blue projection tube for projecting optical images in response to red, green, and blue video signals to project the optical images from a back side of a screen by the respective projection tubes and which changes optical paths of projected video lights from the

projection tubes in a screen direction, the mirror comprising:

a glass substrate;

a reflective film of silver or a silver alloy forming a reflective surface on the glass substrate; and

a topcoat film formed of a transparent resin on the reflective film,

wherein a film thickness of the topcoat film is set based on a refractive index of the topcoat film.

5. The back reflective mirror according to Claim 4, wherein a reflectance characteristic of the back reflective mirror has a ripple shape by the topcoat film with respect to a wavelength, and

the wavelength of any crest of the ripple shape indicated by the reflectance characteristic agrees with that of a luminescent line of light emitted from the green projection tube.

6. The back reflective mirror according to Claim 4, wherein assuming that the refractive index of the topcoat film is n, the film thickness of the topcoat film satisfies a condition of $0.626/n \pm 0.02$ μm.

7. The back reflective mirror according to Claim 4, wherein a reflectance characteristic of the back reflective mirror has a ripple shape by the topcoat film with respect to a wavelength, and

the wavelength of any crest of the ripple shape indicated by the reflectance characteristic

agrees with that of a luminescent line of light emitted from the red projection tube.

8. A back reflective mirror which is used in a back projection type video display device for modulating a light intensity of light from a light source by a display element to form an optical image in response to a video signal and for projecting the optical image from a back side of a screen by an optical unit and which changes an optical path of a projected video light from the optical unit in a screen direction, the mirror comprising:

a glass substrate;

a reflective film of silver or a silver alloy forming a reflective surface on the glass substrate; and

a topcoat film formed of a transparent resin on the reflective film,

wherein a film thickness of the topcoat film is set based on a refractive index of the topcoat film.

9. The back reflective mirror according to Claim 8, wherein a reflectance characteristic of the back reflective mirror has a ripple shape by the topcoat film with respect to a wavelength, and

the wavelength of any crest of the ripple shape indicated by the reflectance characteristic agrees with that of a green luminescent line of light emitted from the light source of the optical unit.

10. The back reflective mirror according to Claim

9, wherein assuming that the refractive index of the topcoat film is n, the film thickness of the topcoat film satisfies a condition of $0.635/n \pm 0.02$ μm.

11. The back reflective mirror according to Claim 8, wherein a reflectance characteristic of the back reflective mirror has a ripple shape by the topcoat film with respect to a wavelength, and

the wavelength of any valley of the ripple shape indicated by the reflectance characteristic agrees with that of a yellow luminescent line of light emitted from the light source of the optical unit.

12. A back projection type video display device comprising:

a video generation source for forming an optical image in response to a video signal;

a screen;

a projection unit for projecting the optical image formed by the video generation source onto a back face of the screen; and

a back reflective mirror for changing an optical path of a projected video light from the projection unit in a screen direction, the mirror including:

a glass substrate;

a reflective film of silver or a silver alloy forming a reflective surface on the glass substrate; and

a topcoat formed of a transparent resin on

the reflective film.

13. A back projection type video display device comprising:

a red projection tube, a green projection tube, and a blue projection tube for forming optical images in response to red, green, and blue video signals;

a screen;

a projection unit for projecting the red, blue, and green optical images formed by the respective projection tubes from a back side of the screen; and

a back reflective mirror for changing optical paths of projected video lights from the projection tubes in a screen direction, the mirror including:

a glass substrate;

a reflective film of silver or a silver alloy forming a reflective surface on the glass substrate; and

a topcoat formed of a transparent resin on the reflective film.

14. A back projection type video display device comprising:

a light source for radiating light;

a display element for modulating an intensity of the light from the light source to form an optical image in response to a video signal;

a screen;

an optical unit for projecting the optical

image formed by the display element from a back side of the screen; and

a back reflective mirror for changing an optical path of a projected video light from the optical unit in a screen direction, the mirror including:

a glass substrate;

a reflective film of silver or a silver alloy forming a reflective surface on the glass substrate; and

a topcoat formed of a transparent resin on the reflective film.